

Application No. 10/528,298
Amendment Dated: December 2, 2009
Reply to Office Action Dated July 2, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 – 10. (cancelled)

11. (currently amended) A process for preparing a self lubricating varnish comprising a modified polymer having a base polymer to which is attached a pendant aliphatic chain containing at least 15 carbon atoms, said process comprising the steps of:

preparing a modified diisocyanate to which is attached a pendant aliphatic chain containing at least 15 carbon atoms, said modified diisocyanate being obtained by reacting an isocyanate functional group of a triisocyanate with a terminal functional group of an aliphatic chain;

carrying out said preparation of the modified diisocyanate in a solvent medium with stirring and heating, so that said heating is to a temperature sufficient to cause a reaction between ~~reacts~~ said isocyanate function group with said terminal functional group; and

mixing said modified diisocyanate with at least one difunctionalized monomer containing two functional groups which are reactive with the isocyanate functional groups of the modified diisocyanate to carry out said synthesis of said modified polymer.

Application No. 10/528,298
Amendment Dated: December 2, 2009
Reply to Office Action Dated July 2, 2009

12. (previously presented) The process for preparing a modified diisocyanate as claimed in claim 11, wherein said terminal functional group is selected from alcohols, anhydrides, carboxylic acids and amines.

13. (cancelled).

14. (previously presented) The process for preparing a self-lubricating insulating varnish as claimed in claim 11, wherein said base polymer is a polyamide-imide.

15. (previously presented) The process for preparing a self-lubricating insulating varnish as claimed in claim 11, wherein said base polymer is selected from polyurethanes, polyamides, polyesters, polyester-imides, solderable polyester-imides, polyester amide-imides, polyimides, polyepoxide compounds and polyphenoxide compounds.

16. (previously presented) The process for preparing a self-lubricating insulating varnish as claimed in claim 11, wherein said base polymer is a semiaromatic polyamide and wherein an anchor group₂ attaching the base polymer to said pendant aliphatic chain₂ is a urethane or an amide, such that said self-lubricating insulating varnish is thermally adhering.

17. (previously presented) The process for preparing a self-lubricating insulating varnish

Application No. 10/528,298
Amendment Dated: December 2, 2009
Reply to Office Action Dated July 2, 2009

as claimed in claim 11, wherein, said base polymer being a polyurethane, the process further comprises a step of mixing the modified polyurethane with a polymer selected from a solderable polyester-imide and a modified solderable polyester-imide.

18. (previously presented) The process for preparing a self-lubricating insulating varnish as claimed in claim 11, wherein a difunctionalized monomer containing two functional groups is mixed with said modified diisocyanate.

19. (previously presented) A process for producing an enameled electrical conductor, said process comprising the steps of:

preparing the self-lubricating insulating varnish as claimed in claim 11; and
coating an electrical conductor with a layer of the self-lubricating insulating varnish.

20. (currently amended) A process for producing an enameled electrical conductor, said process comprising the steps of:

preparing a modified diisocyanate to which is attached a pendant aliphatic chain containing at least 15 carbon atoms, said modified diisocyanate being obtained by reacting an isocyanate functional group of a triisocyanate with a terminal functional group of an aliphatic chain;

carrying out said preparation of the modified diisocyanate in a solvent medium with stirring and heating wherein said heating is to a temperature sufficient to cause a reaction

Application No. 10/528,298
Amendment Dated: December 2, 2009
Reply to Office Action Dated July 2, 2009

between said isocyanate function group with said terminal functional group;

mixing said modified diisocyanate with at least one difunctionalized monomer containing two functional groups which are reactive with the isocyanate functional groups of the modified diisocyanate in order to obtain a self lubricating insulating varnish having a modified polymer with a base polymer to which is attached a pendant aliphatic chain containing at least 15 carbon atoms; and

coating an electrical conductor with a layer of said self-lubricating varnish.